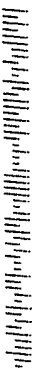


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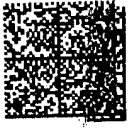
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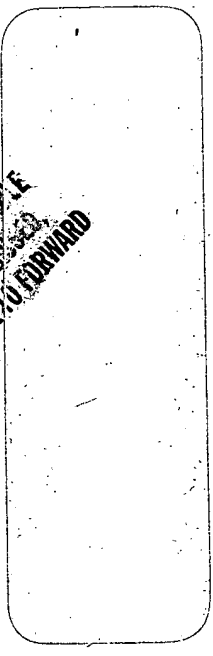
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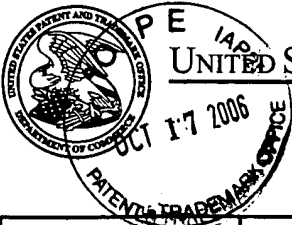


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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,928	07/17/2003	Michael Gilfix	AUS920030395US1	8413

7590

09/26/2006

Greg Goshorn, P.C.  
Attn: Greg Goshorn  
Suite 115-119  
2110 W. Slaughter Lane  
Austin, TX 78748

EXAMINER

HOFFMAN, BRANDON S

ART UNIT

PAPER NUMBER

2136

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/621,928

Applicant(s)

GILFIX ET AL.

Examiner

Brandon S. Hoffman

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7-17-03
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on July 17, 2003, is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The computer program product in independent claim 15 contains logic in a memory; there is no concrete, tangible, useful, final result. The end result of claim 15 (which is non-tangible) is memory with a stored classification value.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1, 2, 7-10, 15, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Juels et al. (U.S. Patent Pub. No. 2002/0029341).

Regarding claims 1, 9, and 15, Juels et al. teaches a method/system/computer program product of detecting intrusion attempts on a computing system, comprising the steps of:

- Creating a first mapping profile of a valid password (fig. 13);
- Storing the mapping profile in memory (paragraph 0111);
- Creating a second mapping profile of an entered password (fig. 15, ref. num 1510-1524);
- Calculating a profile score by comparing the first mapping profile to the second mapping profile (fig. 15, ref. num 1526);
- Comparing the profile score to a threshold value (fig. 15, ref. num 1530); and
- Classifying the entered profile into one of two or more security classifications based upon the comparison between the profile score and the threshold value (fig. 15, ref. num 1580).

Regarding claims 2, 10, and 16, Juels et al. teaches wherein at least one of the security classifications represents an intrusion attempt on the computing system (paragraph 0147-0149).

Regarding claim 7, Juels et al. teaches wherein the computing system is a personal computer (paragraph 0028).

Regarding claim 8, Juels et al. teaches wherein the computing system is a telephone voice response system (fig. 14, ref. num 1460).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-6, 11-14, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juels et al. (U.S. Patent Pub. No. 2002/0029341) in view of Zilberman (U.S. Patent No. 6,442,692).

Regarding claims 3, 11, and 17, Juels et al. teaches all the limitations of claim 1, above. However, Juels et al. does not specifically teach the password being entered on a keyboard, but rather entering the password through other means, such as clicking certain images in an order, or hiding elements on a screen in certain regions (see paragraph 0016 of Juels et al.).

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Zilberman teaches wherein the first mapping step and the second mapping step each comprise the steps of:

- Comparing successive characters of the respective password (table 4);
- Assigning a value to each pair of successive characters based upon a keyboard characteristic corresponding to the pair of successive characters (table 5); and
- Generating a password mapping for the respective password based upon the assigned value (fig. 1).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine comparing successive keyboard inputs, as taught by Zilberman, with the method/system/computer program of Juels et al. It would have been obvious for such modifications because it is important not only to get the right character inputs from the keyboard, but also get the right order. A password of "mypass1" is not acceptable if "py1sams" is entered.

Regarding claims 4, 12, and 18, Juels et al. as modified by Zilberman teaches wherein the keyboard characteristic is the distance between the keys of the keyboard representing the pair of characters (see fig. 9 and 10 of Juels et al.).

Regarding claims 5, 13, and 19, Juels et al. as modified by Zilberman teaches wherein the keyboard characteristic is the likelihood that one of the pair of

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characteristics is typed on a keyboard when the other key of the pair is intended to be typed (see paragraph 0019 of Juels et al.).

Regarding claims 6, 14, and 20, Juels et al. as modified by Zilberman teaches wherein the second mapping step further comprise the step of:

- Comparing the valid password to the entered password (see fig. 15, ref. num 1580 of Juels et al.); and
- Determining when a pair of characters in the entered password are a transposition of a corresponding pair of letters in the valid password (see paragraph 0018 of Juels et al.); and
- When there is a transposition, adjusting the profile score (see paragraph 0019 of Juels et al.).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon S. Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser G. Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Branda Hef*

BH

NASSER MOAZZAMI  
PRIMARY EXAMINER

*[Signature]*

9,19,06

In Place of FORM PTO-1449 (Modified)

Serial No. Unknown

LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE  
STATEMENT

Applicant: Gilfix et al.

Filing Date: Filed Concurrently

Group: Unknown

Atty. Docket No. AUS920030395US1

Reference Designation				U. S. PATENT DOCUMENTS			Filing Date if
Examiner Initial	Document Number	Date	Name	Class	Subclass	Appropriate	
<u>BH</u>	AA 4,621,334	11/04/1986	Garcia	364	550		
<u>BH</u>	BB 4,805,222	02/14/1989	Young et al.	382	2		
<u>BH</u>	CC 5,303,299	04/12/1994	Hunt et al.	379	88		
<u>BH</u>	DD 5,557,686	09/17/1996	Brown et al.	382	115		
<u>BH</u>	EE 20020133721	09/19/2002	Adjaoute	713	201		
<u>BH</u>	FF 20020152034	10/17/2002	Kondo et al.	702	19		

FOREIGN PATENT DOCUMENTS							
Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation Yes No	
<u>GG</u>							

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
Examiner Initial			
<u>BH</u>	AS	Monrose et al., "Password Hardening Based On Keystroke Dynamics", IJIS (2001) V.1, pp. 1-15, 09/17/2001.	
<u>BH</u>	AT	Tzong-Chen, Remote Login Authentication Scheme Based Upon a Geometric Approach, Dept. of Information Management, National Taiwan Institute of Technology, Dec. 1995.	
<u>BH</u>	AU	Timing Analysis of Keystrokes and Timing Attacks on SSH, Dawn Xiaodong Song, David Wagner, Xuqing Tian.	
<u>BH</u>	AV	Fabian Monrose, Aviel Rubin, Authentication via Keystroke Dynamics.	

Examiner: /Brandon Hoffman/

Date Considered: 09/18/2006

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**Notice of References Cited**

Application/Control No.

10/621,928

Applicant(s)/Patent Under

Reexamination

GILFIX ET AL.

Examiner

Brandon S. Hoffman

Art Unit

2136

Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,442,692 B1	08-2002	Zilberman, Arkady G.	713/184
*	B	US-2002/0120592 A1	08-2002	Juels et al.	706/8
*	C	US-2002/0029341 A1	03-2002	Juels et al.	713/184
*	D	US-5,761,329 A	06-1998	Chen et al.	382/116
*	E	US-5,557,686 A	09-1996	Brown et al.	382/115
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.